USFWS and NMFS Review Draft Terms and Conditions (Draft ROD Appendix 5)

US Fish and Wildlife Service

Received February 2, 2016 (initial draft T&Cs March 11, 2015)

- 1. To implement reasonable and prudent measure #1 (avoid bull trout), the UNF/WWNF shall enforce upon claimants, the following:
 - a. Placer mining operations, temporary road construction, water withdrawal and use of stream fords must shut down immediately if the operator observes adfluvial adult (large) bull trout. The operation must remain shut down until the fish move(s) at least 100 ft. upstream of the operation or at least 500 ft. downstream.
 - b. Miners must be particularly vigilant with regard to early rearing bull trout, as this life stage may be present in the substrate being affected by fording. If early rearing bull trout are observed, or their presence suspected, in or near the substrate while fording is occurring, operations must shut down until the fish have moved out of the immediate area. Miners and a FS fisheries biologist must coordinate regarding the identification of early rearing bull trout.
 - c. All mining operations must shut down immediately if any sick, injured, or dead specimen of bull trout is found (see Section 8.5). In addition, if any fish eggs are excavated or if destruction of redds is observed, operators must contact the FS and receive authorization to proceed prior to resuming operations.
- 2. To implement reasonable and prudent measure #2 (minimize habitat effects), the UNF/WWNF shall enforce upon claimants, the following:
 - a. All placer mine "no activity" streams buffers must be maintained between streams and mining activities.
 - b. Prior to using stream fords, operators must meet with a FS fisheries biologist who will inspect each existing and proposed ford site. No fording will be allowed in areas of known bull trout spawning or in areas identified as spawning habitat.
 - c. Ford crossing will only occur during the ODFW in-water work window for all use. If the miner proposes to ford outside the in-water work window, then a FS fish biologist must inspect the crossing and approve beforehand.
 - d. Fords must be located in areas of large substrate not preferred by spawning bull trout.
 - e. There should not be any streambank disturbance except at fords, because each Plan has a "no activity" buffer. Should unexpected streambank disturbance occur in any way, the banks must be restored to the original contour and re-vegetated with native species at the end of the annual mining season the disturbance occurred in.
 - f. Camping areas, paths, and other disturbed sites that are located along stream banks and that are associated with mining operations must be re-vegetated or otherwise restored to their original conditions at the end of the mining season.

- g. Any temporary roads, road repair or road maintenance proposed by the claimant that will occur within any RHCA or which has the potential to transmit sediment to stream channels must be specifically approved by the FS in detail and in writing, and will be inspected by the FS during the mining season.
- h. Operators must cease activities during the wet periods when Project activities are causing excessive ground disturbance (visible ground disturbance due to soil saturation) or excessive damage (muddying/rutting) to roads
- i. Mining operators must not remove, relocate, or disturb stable in-stream woody debris or boulders greater than 12 inches in diameter.
- j. The operator will not remove any large down or standing woody debris or trees for firewood within one tree length of the stream.
- k. Operators will not move cobbles in the stream course to the extent that the deepest and fastest portion of the stream channel (i.e., the thalweg) is altered or moved.
- 1. No mechanized equipment will be operated below the mean high water mark except for when fording at designated sites.
- m. Gasoline and other petroleum products must be stored in spill-proof containers at a location that minimizes the opportunity for accidental spillage.
- n. A spill kit must be available in case of accidental spills. Soil contaminated by spilled petroleum products, must be excavated to the depth of saturation and removed from the National Forest for proper disposal.
- o. Operators will not entrain, mobilize, or disperse any mercury discovered during mining operations. Operators must cease operations and notify the FS if mercury is encountered in placer material. Operators must not use mercury, cyanide, or any other hazardous or refined substance to recover or concentrate gold.
- p. To prevent the threat of aquatic invasive species, tools used while placer mining, and associated equipment must be thoroughly cleaned with a pressure washer and dried at least five days prior to use on the Forest.
- 3. To implement reasonable and prudent measure #3 (Implementation, effectiveness, bull trout monitoring and reporting), the UNF/WWNF shall:
 - a. Once per season, turbidity monitoring shall be conducted to assess the extent and duration of turbidity plumes associated with "no activity" buffers of 20 ft. or less, i.e. Eddy Shipman on Granite Creek, Grubsteak on Clear Creek, and Ruby Group on Ruby and Clear creeks. Turbidity monitoring shall occur during active placer mining at 300 ft. downstream of the project area. Turbidity at the downstream sample location shall be recorded every 30 minutes until the plume has dissipated.
 - b. Once per week during construction and then once a month for the rest of the first season only, turbidity monitoring shall be conducted to assess the extent and duration of turbidity plumes associated with temporary road construction for Tetra Alpha Placer and Tetra Alpha Lode and Mill. Turbidity monitoring shall occur during construction of the temporary road. If noticeable turbidity is observed reaching the stream, all activities must cease immediately or decrease in intensity until no increase in turbidity is observed at a 300 ft. mark downstream of the origin of turbidity.
 - c. Once per month, per the first season, turbidity monitoring shall be conducted to assess the extent and duration of turbidity plumes associated with each stream ford and must occur during mobilization of both heavy equipment and daily equipment such as pick-up trucks and all-terrain vehicles. Turbidity monitoring

shall occur approximately 300 ft. downstream of each ford, immediately following fording (i.e., when the plume reaches the monitoring location), and occur every five minutes until the plume dissipates. Background turbidity shall be collected prior to fording, and may be collected at the downstream monitoring location. The type and number of vehicles/heavy equipment fording the stream shall also be recorded.

- d. Stream flow shall be measured, monitored and recorded during water withdrawals for each mine a minimum of once per month each season for the following mines: Grubsteak mine on Clear Creek, Lightning Creek mine on Lightning Creek; and Tetra Alpha Placer, Lode and mill mines on Boulder Creek.
- e. Water withdrawal from instream flow cannot exceed more than the established water rights identified in the Assessment during the water withdrawal period (Table 3).
- f. Provide a written report or letter to the Service, by December 31 of each year indicating:
 - i. The actual number of bull trout taken, if any, including observations by claimants of any adfluvial and early life stages of bull trout (per Terms and Conditions 1.a. and 1.b.), and any relevant biological/habitat data or other pertinent information on bull trout that was collected;
 - ii. The results of the turbidity plumes observed in the "no activity buffers" for Eddy Shipman on Granite Creek, Grubsteak on Clear Creek, and Ruby Group on Ruby and Clear creeks.
 - iii. The results of the turbidity monitoring associated with each ford.
 - iv. The results from stream flow monitoring associated with each water withdrawal.
 - v. The results of any unexpected streambank disturbance, along with the restoration and revegetation associated with the disturbance.
 - vi. Any new findings by FS fisheries biologist regarding stream fording in newly identified bull trout spawning and rearing habitat and relevant mitigation.
 - vii. Claimant/operator compliance with the Terms and Conditions of this Opinion;
 - viii. Remedies to address and resolve any identified problems; and
 - ix. Any environmental effects of the action that were not considered in the Assessment or this Opinion.
 - x. In addition, the report will include the location and duration of each miners/Plan's mining activities. Individual miners should keep a daily log of mining activities to facilitate the FS's compliance with this monitoring requirement.
 - g. Submit all reports to: U.S. Fish and Wildlife Service, Attn: Suzanne Anderson, 3502 Highway 30, La Grande, OR 97850

National Marine Fisheries Service

Received January 6, 2016 (initial draft T&Cs June 23, 2015)

1. To implement reasonable and prudent measure #1 (placer mining), the UNF/WWNF shall ensure that:

- a. No mining activities occur in reaches and sites that have been identified to contain steelhead or salmonid spawning habitat.
- b. All streams buffers are maintained between streams and mining activities.
- c. No shade trees or riparian vegetation are removed along stream banks.
- d. Have a staff monitor the sites at least once per season to ensure the following:
 - i. Turbidity plumes do not extend beyond 300 feet downstream.
 - ii. Turbidity plumes do not extend across more than half of the stream width.
 - iii. Require the miner to cease operations if the criterion for the extent of take in this opinion is exceeded (*i.e.* active surface area disturbed per site as identified in Table 2; or turbidity exceeded farther than 300 feet downstream from the active worksite).
 - iv. All required end of season vegetation planting, restoration and reclamation are completed at the end of the season.
- e. Include all terms and conditions in all permits, grants, or contracts issued under the proposed action.
- 2. To implement reasonable and prudent measure #2 (stream fords), the UNF/WWNF shall ensure that:
 - a. No stream ford crossings in known spawning habitat.
 - b. Stream crossing only occurs during the in-water work period July 15–Aug 15. If the miner proposes to ford outside the in-water work window, then a FS fish biologist must inspect the crossing and approve beforehand.
- 3. To implement reasonable and prudent measure #3 (water withdrawals), the UNF/WWNF shall ensure that:
 - a. During water withdrawals, streams maintain sufficient instream flow, and temperatures to support rearing juvenile steelhead and salmonids during withdrawal periods.
 - b. Stream flow is measured, monitored and recorded during water withdrawals for each mine at least once per month each season during low flows for the following sites: Olive Tone mine on Olive Creek, Lightning Creek mine Lightning Creek; and Tetra Alpha Placer, (lode and mill) mine on Boulder Creek.
 - c. Water withdrawal from instream flow cannot exceed more than the established water rights identified in the BA during the summer low flow season.
 - d. Require the miner to cease operations if stream flow below the operation site is dry below where the miner is working prior to August 15, then the miner must cease withdrawing water from the creek until flow exceeds the amount withdrawn.
- 4. To implement reasonable and prudent measure #4(water quality), the UNF/WWNF shall ensure that:
 - a. No direct discharge of processed water into streams with ESA-listed fish or critical habitat will be allowed.

- b. No chemicals will be used during mining activities to process rock, tailings or materials that can pollute or contaminate sediments or water quality.
- c. A supply of sediment control materials (*e.g.*, biofilter, sandbags, straw bales[1], wattles) is on site for emergency erosion control purposes.
- d. Erosion controls are in place and properly installed from the commencement of disturbance through site restoration. Silt fences installed prior to placer activities and the streams.
- e. Turbidity monitoring occurs as follows:
 - i. All in-water disturbance, or discharge of return water shall be conducted to minimize sedimentation and turbidity in the stream.
 - (1) If a turbidity plume is observed. Compliance will be measured or observed approximately 300 ft downstream from the project area. If turbidity exceeded background levels by more than 10% above background levels at 300 feet from the activities, and any steps taken to reduce turbidity levels.
 - ii. If visual plume is observed, best management practices will be modified and monitoring continued every 4 hours.
 - iii. Require the miner to cease operations if the criterion for the extent of take in this opinion is exceeded (*i.e.* turbidity plume beyond 300 feet downstream from the active worksite).
- f. Mechanical staging. Vehicles must be fueled, operated, maintained, and stored as follows:
 - i. Vehicle staging, cleaning, maintenance, refueling, and fuel storage must take place in a vehicle staging area 150 ft or more from any stream, waterbody or wetland. All vehicles operated within 150 ft of any stream, waterbody or wetland must be inspected daily for fluid leaks before leaving the vehicle staging area. Any leaks detected must be repaired in the vehicle staging area before the vehicle resumes operation. Inspections must be documented in a record that is available for review on request by UNF/WWNF or NMFS.
 - ii. All equipment operated must be cleaned before beginning operations to remove all external oil, grease, dirt, and mud.
 - iii. Stabilize all disturbed areas following any break in work unless construction will resume in 4 days.
- g. A chemical and pollution control plan and will be prepared and carried out, commensurate with the scope of the project, which includes:
 - i. The name, phone number, and address of the person responsible for accomplishing the plan.
 - ii. Best management practices to confine, remove, and dispose of waste, debris, discharge water, petroleum product, or other hazardous materials generated, used, or stored on-site.
 - iii. Procedures to contain and control a spill of any hazardous material generated, used or stored onsite, including notification of proper authorities.
 - iv. Steps to cease work under high flow conditions, except for efforts to avoid or minimize resource damage.

5.	To implement rease	onable and prudent n	measure #5 (monitorin	ig and reporting), t	he UNF/WWNF sl
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- a. Provide NMFs with a copy of the annual monitoring report. It should include the following:
 - i. Information that is required to be provided to the ODEQ/ and or DSL describing the operator compliance with the placer mining rules and the results of visual turbidity monitoring log.
 - ii. In addition, submit the results of the Forest Service staff's monitoring log and monitoring results of the downstream extent of the turbidity plume, its width across the stream, and the cubic yards of disturbed material based on the area measurements to NMFS.
 - iii. Provide monitoring information of water withdrawals, including dates, duration of withdrawals, amounts of water withdrawals, and stream flow measurements.

^[1] When available, use certified weed-free straw or hay bales to prevent introduction of noxious weeds.